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CLAIMS:

(amended August 2, 2005)

- 1. An aerogel molded part containing an inorganic filler containing hollow spheres and having a thermal conductivity of up to 0.5 Wm⁻¹K⁻¹.
- 2. The aerogel molded part according to claim 1, characterized in that said aerogel is a silica aerogel, a carbon aerogel or an organic aerogel, especially a resorcinol/formaldehyde aerogel.
- 3. The aerogel molded part according to claim 1, characterized in that said hollow spheres consist of glass.
- 4. The aerogel molded part according to claim 1, characterized in that the thermal conductivity of the filler is up to $0.1~\rm Wm^{-1}K^{-1}$.
- 5. The aerogel molded part according to claim 1, characterized in that said aerogel contains a filler in an amount of from 70% to 90% by volume.
- The aerogel molded part according to claim 1, characterized in that the thermal conductivity of the molded part is lower than the thermal conductivity of the filler-free aerogel.
- 7. A process for the preparation of an aerogel molded part according to any of claims 1 to 6, comprising the following steps:
 - a. preparation of a sol;
 - b. mixing the sol with a filler;
 - c. gelling of the sol into a gel; and
 - d. Drying of the gel.
- 8. The process according to claim 7, characterized in that the resulting aerogel molded part is pyrolyzed.